

WATER QUALITY STANDARDS IMPLEMENTATION
25 Pa. Code, Chapter 96
40 Pa.B. 876 (February 13, 2010)
Environmental Quality Board Regulation # 7-451
(Independent Regulatory Review Commission #2821)
Comment/Response Document

WATER QUALITY STANDARDS IMPLEMENTATION

On February 13, 2010, the Environmental Quality Board (Board, EQB) published a notice of the comment period on a proposed rulemaking concerning an amendment to 25 Pa Code, Chapter 96 (relating to Water Quality Standards Implementation). The amendment would codify into regulation, with amendments, the Department's existing guidance entitled Final Trading of Nutrient and Sediment Reduction Credits – Policy and Guidelines (No. 392-0900-001, December, 2006) as it relates to the Chesapeake Bay (“Nutrient Credit Trading Policy”). The public comment period closed on March 15, 2010.

This document summarizes the written comments received from the public during the public comment period. Each public comment is listed with the identifying commentator number for each commentator that made the comment. A list of the commentators, including name, affiliation and address can be found at the beginning of this document.

**Table of Commentators to the Environmental Quality Board
Water Quality Standards Implementation # 7-451 (IRRC # 2821)**

ID	Name/Address
1	Ms. Rebecca Burke Lycoming County 48 West Third Street Williamsport PA 17701
2	Dr. Douglas Beegle Penn State University 116 ASI Building University Park, PA 16802
3	Mr. Pete Slack PMAA 1000 North Front St. Wormleysburg PA 17043
4	Mr. George Myers Milton Regional Sewer Authority 5585 State Route 405, PO Box 433 Milton PA 17847
5	Ms. Christine Maggi-Weigle Lycoming County Water and Sewer Authority 216 Old Cement Road Montoursville PA 19446
6	Mr. Steven Hann Hamburg, Rubin, Mullin, Maxwell & Lupin, P.C. 375 Morris Road, PO Box 1479 Lansdale PA 19446
7	Mr. George Hazard PA Farm Bureau 510 S. 31 st Street Camp Hill PA 17001
8	Mr. Grant Gulibon PA Builders Association 600 North 12 th Street Leymone PA 17043
9	Mr. George Hazard Agricultural Advisory Board
10	Mr. Walt Nicholson Williamsport Sanitary Authority 253 West Fourth Street Williamsport PA 17701
11	Ms. Kim Kaufman IRRC 333 Market Street, 14 th Floor Harrisburg PA 17101

Many of the following comments have been condensed and/or paraphrased. Similar comments have been grouped. The numbers in parentheses following each comment correspond to the commentators (listed on page 3).

General Comments

1. **Comment:** Many commentators pointed out concerns with the terms offsets and credits. Specific comments included:
 - a. “Credits” and “offsets” are two different methods that could be utilized by a permittee to meet its annual nutrient cap load, and each should be addressed in separate sections of any final regulation. The proposed regulation differentiates between the two only with respect to credits being tradable, when, in fact, the two concepts are fundamentally different. The Department’s seemingly parallel treatment of the two creates confusion and difficulty for both the regulated community in determining whether trading is appropriate and the Department, who will be regulating such trading.
 - b. Offsets have traditionally been applied to situations where septic systems are taken out of operation and the properties are connected to public sewer, or when a single entity owns/operates two or more treatment plants and offsets are applied intra-facility between the treatment plants. In the proposed regulation, the Department recognizes that Best Management Practices (“BMPs”) can be used to calculate an offset. The Department should provide specific removal efficiencies for typical BMPs in lieu of relying solely on the Chesapeake Bay Watershed Model for offset calculations.
 - c. Any definition or application of “offset” must be clear that offsets are used by a NPDES permittee to directly offset (or adjust) that discharger’s permitted annual nutrient cap load.
 - d. Traditionally offsets have not been subject to trading ratios as set forth in the definition section of the proposed regulation (e.g., see definition of “trading ratio”).
 - e. The term “offsets” should not be included in the proposed definitions of “threshold” or “verification.”
 - f. Offsets need not be “certified, verified and registered” (e.g., see proposed section addressing “Chesapeake Bay water quality” (Section 96.8(b))).
 - g. The term “offsets” should be deleted from the collective terminology “credits and offsets” that is throughout the proposed regulation, and a separate section should be drafted to deal with offsets that will codify the basis for use in NPDES permits and to provide permit writers guidance.
(1)(3)(4)(5)(6)(10)

Response: The Department made a number of revisions to the final-form rulemaking to address the concerns raised by the commentators. Specifically, the definition of “offset” has been revised to more accurately reflect the use of the term and to match more closely the permit definition. The term was also removed from many sections of the final-form rulemaking and the final-form

rulemaking was clarified such that offsets are approved rather than being treated the same as credits.

- 2. Comment:** The Board needs to explain the differences and similarities between a credit and an offset. In addition, the procedures for certification and verification or approval processes for credits and offsets need to be clearly delineated in the final-form regulation. (11)

Response: The simple distinction between the two terms is that a credit can be sold and is certified, verified and registered prior to use toward a permit requirement. An offset, however, cannot be sold but only applied to a specific permit after it has been approved. An offset may be generated by the connection of an existing onlot system and the offset is maintained by the facility that is treating the new source of waste. Clarification has been provided throughout the final-form rulemaking.
- 3. Comment:** One commentator stated that the regulation should be clarified to reflect that at the end of the compliance year, any unused loadings (including any unused offsets) are credits that can be traded and that the definition of “offset” and/or “credit” should be clarified to reflect such result. (4)

Response: This specific clarification has not been added to the final-form rulemaking. A permittee will always apply the total number of offsets to its cap load for its facility, so there are no offsets remaining. In discussing trading or selling excess capacity load that exists after offsets are applied, only credits may be brought, traded or sold, not offsets. Subsection (e)(3)(iv) has been added to reflect that a point source calculation may include excess load capacity.
- 4. Comment:** Several comments stated that there is ambiguity in how the Department will have the ability to readjust BMP reduction efficiencies, thresholds, delivery ratios, etc. The comments stated that to maintain confidence and stability in the trading program, it must be stated clearly in the regulation that once credits are verified, registered and sold, the number of credits is guaranteed for the current or future years for which they are purchased and cannot be reduced based on further review of how they were originally determined. (3)(4)(5)(10)

Response: Flexibility in the BMP efficiencies and in the edge of segment and delivery ratios is needed to ensure the actions undertaken within the program reflect the water quality standards downstream. The Chesapeake Bay model is ever evolving to accurately measure and model the progress that is made in reaching a restored Bay. To balance this flexibility the Department has added subsection (e)(8), which outlines that a pollutant reduction activity will generally be certified for a duration of 5 years.
- 5. Comment:** One commentator stated that the proposed regulation fails to establish objective standards. A major concern is that the regulated community is not apprised of the specific criteria that the Department will use such as: the

specific reserve factor, if any, that would apply to point source trades; how trades will be calculated based upon the deliverable loads of the seller; and how trades will be calculated based upon the deliverable loads of the purchaser. The final regulation should identify the underlying criteria for how trades can occur. (4)

Response: The final-form rulemaking identifies how credits and offsets may be used in the Chesapeake Bay Watershed. Subsection (h) in the final-form rulemaking refers to the use of credits to meet NPDES permit requirements. Credits are calculated based on what is delivered to the Chesapeake Bay. The authorizing language in NPDES permits will contain the conditions by which credits may be applied toward compliance, which will address delivered loads. The Department has provided clarification in the definition of “reserve ratio” that it will be 10%. The final-form rulemaking states that information on the delivery and edge of segment ratios will be available on the Department’s Nutrient Trading website.

6. **Comment:** One commentator stated that the Department, to the extent that it does not already do so, must make transparent the information it used in calculating credits and offsets. The data, formulas and assumptions used have a large impact on land use decisions, and potential permit applicants who may have need to offset new discharges need the maximum amount of useful information available to them for this purpose. (8)

Response: This information will be readily available on the Department’s Nutrient Trading website.

7. **Comment:** The Preamble states: "The proposed rulemaking will provide clear and certain standards for nutrient credit trading in this Commonwealth...." Commentators disagree. They claim the regulation, like the existing policy document, does not contain clear and concise criteria. They contend that it creates ambiguity by allowing DEP to readjust best management practice efficiencies, thresholds, ratios, and other factors. Participation in this program is voluntary. It is also beneficial because it reduces pollution at lower costs. However, the rules governing the trading market must be consistent and predictable to encourage investment and participation. Therefore, the Board and DEP need to work with stakeholders to develop greater specificity in the criteria, procedures and standards in the final-form regulation. (11)

Response: The Department worked with stakeholders to develop the final-form rulemaking and add greater specificity. Specifically, the Department added clarity by identifying where ratios and efficiencies can be found, clarifying the three-step process related to certification, verification and registration, providing a timeframe for certification and clarifying permittee responsibility.

8. **Comment:** Provisions in the proposed regulation refer to eligibility determinations, credit certifications, verifications or other types of decisions to be made by DEP. What are the timetables for such actions? How will

affected parties be notified? Will the DEP provide written notice? To increase predictability for buyers and sellers, the Board should address these questions in the final-form regulation. (11)

Response: Eligibility determinations will be made as part of the credit certification action. Consistent with current practice, the Department will attempt to issue decisions on certification within 60 days of receipt of a complete proposal. This time period will also include a 30-day period for informal comments from the public. The final-form rulemaking does not include a time period because projects vary widely in scope, some requiring significantly more review. In addition to maintaining communication with submitters during the Department's review, the Department will publish notice in the *Pennsylvania Bulletin* when it makes a final certification decision, per subsection (j) in the final-form rulemaking. The Department's website and on-line trading platform, which is called NutrientNet, will contain information about certified projects as well as market pricing.

9. **Comment:** One commentator stated that it is imperative that the regulation provide a meaningful process for appeal. This commentator stated that the regulation should, at a minimum, allow for a permittee to apply or sell credits in a subsequent water year should it obtain a favorable decision on an appeal. (4)

Response: The final-form rulemaking does not include an appeal process, as it is not necessary and the Department does not typically set forth appeal processes in its regulations. For the nutrient trading program, the Department's certification action (approval or denial) is a final action of the Department that is intended to be appealable. See subsection (e)(1).

10. **Comment:** Many comments were submitted supporting the use of delivery ratios when a point source is applying credits towards compliance. One commentator felt that POTWs farther from the Bay should not be at a disadvantage and have their credits reduced by the delivery ratio when selling to a POTW closer to the Bay who benefited from the uniform effluent limitation standard that was developed. Two commentators did not support the use of delivery ratios when using credits toward compliance. These commentators felt that the delivery ratio should not be applied to point sources because the nutrient trading program was not designed to reduce point source nutrient loads, but rather be a tool that municipalities can use to offset the cost of expensive capital upgrades or to "buy time" until they can prepare for upgrades. And, one commentator felt that point source generated credits should be allowed to be traded or sold to another POTW within a sub-watershed having the same delivery ratio on a pound for pound basis with no reduction in tradable load. (1)(4)(7)(9)(10)

Response: Credits are calculated based on what is delivered to the Chesapeake Bay and will include the application of the reserve ratio. The authorizing language in NPDES permits will contain the conditions by which

credits may be applied towards compliance. The permit conditions will address the issue raised regarding delivered loads.

- 11. Comment:** Several comments were submitted regarding clarification on how the proposed rulemaking affects point source to point source trades. One commentator believed that point source to point source credits should be certified as pound for pound without the 10 percent reserve ratio; and if a reserve ratio is deemed necessary, it should be lower than 10 percent. These commentators also felt that point source credits should be not be subject to the reserve ratio because there is a certainty that the credits were actually generated by virtue of certification on the DMR by the permittee. One commentator stated that the definition of “credit reserve” and its use through the regulation should be clarified to indicate that pollution reduction failures and uncertainty are generally associated with nonpoint source projects and that the credit reserve will not be imposed on point sources generating credits. (1)(4)(10)

Response: The Department has not made these changes. The credit reserve is intended to provide an insurance pool of credits in appropriate times of need, and it will be populated by a 10% reserve ratio applied across the board.

- 12. Comment:** One commentator stated that the proposed regulation should clarify that a point source seeking to have credits verified and registered need not wait until the end of the water year to proceed and that it should be reflected in the regulation that once DMRs are submitted for a month, it can have credits approved and once verified and registered the credits are available for immediate use. Another commentator stated that a POTW NPDES discharger should not be subject to the certification and verification provisions of the regulation applicable to generators of nonpoint source credits. This commentator felt that the permittee’s signature on the discharge monitoring report should be sufficient certification and verification. However the same commentator stated that there should be some aspect of an approval procedure in order to trade or sell future forward strips of multiple years of point source generated credits but should be verified by signature on a DMR. (4)(10)

Response: The final-form rulemaking has been amended to clarify that a point source may obtain certification of a pollutant reduction activity prior to the end of the compliance year, the definition of DMR has been expanded, “pollutant reduction activity” has been defined and includes “effluent control”, subsection (c)(5) has been revised regarding the use of DMR and offset information as an acceptable methodology, and subsection (e)(3)(iv) has been added for calculating reductions generated by a point source. As outlined in subsection (e)(5)(ii)(A), the verification plan can include self-verification, which can be the signed DMR. Please see the response to comment number 45 related to certification duration.

- 13. Comment:** One commentator stated that the Department’s consistent representations that the nutrient trading program provides sewage treatment

plants with options that have the potential to reduce compliance costs substantially is illusory if the Chapter 92a rulemaking were to be finalized as proposed. As outlined in the comment §92a.47(b)(2) would require tertiary treatment where a facility discharges to a water body that is not meeting water quality standards (“WQS”) which would arbitrarily require all facilities subject to the Chesapeake Bay Program (which is identified as an impaired water body) to install tertiary treatment. This commentator felt that such approach would minimize, if not eliminate, the practicality of participating in a trading program and that the Department should not be requiring sewage treatment plants subject to the Chesapeake Bay Program to be meeting tertiary treatment standards. (4)

Response: The referenced section of the proposed Chapter 92a has been removed from the final Chapter 92a rulemaking for reasons unrelated to the commentator’s concern.

14. **Comment:** One commentator stated that §96.8 (b)(6) should be modified to reflect that it only applies to “technology-based effluent limits established under the Clean Water Act, if applicable.” This commentator felt that if the tertiary treatment standards were to be finalized as proposed in Chapter 92a and deemed to be a technology-based standard, then under the proposed trading regulation, the ability to trade to meet the Chesapeake Bay requirements would be significantly hampered. The commentator stated that the trading regulation must clarify that such an outcome from Chapter 92a would not impact the generation of credits or the Department must undertake a cost analysis to identify the implications of such restriction. (4)

Response: Please see response to comment number 13. In addition, the requested revision has not been made, and would have been inconsistent with EPA’s 2003 “Water Quality Trading Policy Statement”.

15. **Comment:** Two commentators questioned the intent of the proposed rulemaking and recommended that a change in the scope be made. In particular they asked if the proposed rulemaking was specific to the Chesapeake Bay Watershed and to smaller watersheds in the future. They suggested that if the intent was for the proposed rulemaking to be used in other watersheds (smaller or different than the Chesapeake Bay), in the future, then references to the Chesapeake Bay should be removed. (7)(9)

Response: The final-form rulemaking is specific to the Chesapeake Bay Watershed and no requested revisions will be made.

16. **Comment:** One commentator stated that the regulation needs to clearly indicate that a mechanism will be in place to transfer the long-term responsibility for ensuring that nutrient credits are in place to offset the pollution loads generated by a new development from the builder/developer to a third party once a project is completed. Developers will be responsible for this for an initial period of 5 years, but failure to explicitly authorize the development and use of such a mechanism will cause a multitude of

difficulties for affected homebuilders, including how to properly price new homes (given the requirement to offset all new pollution loads for the lifetime of the home). (8)

Response: The Department has not made any revisions to the final-form rulemaking to include this mechanism because the mechanism that the commentator seeks is related to Act 537 planning and guidance is available in the Department's "Implementation Plan for Sewage Facilities Planning" document. Specifically, the Act 537 planning submission must include assurances that will be provided to guarantee the long-term operation, maintenance and compliance of the treatment facility, in accordance with 25 Pa. Code §§ 71.65, 71.71 and 71.72 (relating to individual and community sewerage systems; general requirements; sewage management programs for Department permitted sewage facilities and community onlot systems). If a developer or municipality chooses to purchase credits for compliance they are only required to purchase credits sufficient to satisfy each NPDES permit cycle but they must have assurances in place, as they would for other permit obligations, to address long term operation and maintenance. A formal agreement between the municipality and a permittee that establishes the permittee's responsibility for operating and maintaining the system in compliance with its permit by providing credits, and the responsibility of the municipality or local agency for oversight of the system, would normally be an acceptable assurance.

- 17. Comment:** Provisions in the proposed regulation include general references to other laws and regulations. Examples of these provisions include:
- a. Subsection (a), definition of "baseline," Paragraph (i);
 - b. Subsections (b)(5) and (6);
 - c. Subsections (d)(4)(i) and (ii); and
 - d. Subsections (h)(1) and (4).

Our concern with such general references is exemplified by Subparagraph (i) in the definition of "baseline" which includes this phrase "... which must be implemented to meet current environmental laws and regulations related to the pollutant for which credits or offsets are generated." Subsection (a) also defines "pollutant" as "nutrients and sediment," and nutrients" are defined as "nitrogen and phosphorus." Therefore, there should be specific citations to the laws and regulations related to three specific pollutants. All general references to other applicable laws and regulations should be replaced with specific citations in the final-form regulation. (11)

Response: The Department has not made these revisions to the final-form rulemaking since the applicable laws and regulations are dynamic. The approach in the final-form regulation is consistent with that in some Pennsylvania environmental statutes, such as the Oil and Gas Act, 58 P.S. §§601.101-601.605, and the Safe Drinking Water Act, 35 P.S. §§721.1-721.17.

- 18. Comment:** A commentator highlighted what it referred to as a “critical” issue that the Department should consider, especially in light of the forthcoming Chesapeake Bay Total Maximum Daily Load (TMDL). The TMDL will require Pennsylvania to deal with offsetting pollution not only from point sources, such as sewage treatment plants, but also the pollution that results from nonpoint sources such as runoff from agricultural and developed lands. This commentator suggested that there is a need to develop offsetting options for stormwater.

To do this, the commentator advocates and recommends that a “stormwater best management practice (BMP) offset” option be developed as part of the state’s Chapter 102 regulations and that such an option may also have applicability to the nutrient credit trading program. Under a “stormwater BMP offset” program, builders, developers and other applicants would be permitted to fund off-site stream buffers (or other BMPs) in return for offsets of certain post construction stormwater management BMP requirements. Applicants would still need to install all erosion and sedimentation control measures, as well as stormwater facilities to control the runoff rate to pre-development conditions but would offset stormwater infiltration areas.

This process could work in a manner similar to that utilized in wetland banking, and it would assist the Department in enforcing existing conservation requirements in Pennsylvania. Once it is implemented, farmers, the Department, EPA and conservation districts could cooperate in securing a source of funding for these projects in order to: a) Maximize environmental benefits at a reasonable cost; and b) Minimize issues with long-term operation, maintenance and enforcement. Farmers would need to grant a conservation easement along a stream in return for technical assistance to bring the farm into compliance and install the buffer. It may also be possible to generate and sell nutrient credits under this option, which could provide a source of long-term funding to farmers and/or conservation districts. (8)

Response: The final-form rulemaking will allow the use of credits to meet permit effluent limits for pollutants (namely, nitrogen and phosphorus) and sediment. The amendments proposed in the final Chapter 102 rulemaking would specifically authorize trading and credits for riparian buffers in the stormwater context. These provisions of the Chapter 102 amendments are consistent with and would build upon the amendments in this final-form rulemaking.

- 19. Comment:** Two commentators recommended in their comments that because of the short time period afforded to review these proposed rules, the Department should publish any revisions to the proposed regulations in the form of advance notice of final rulemaking for additional public comment prior to final adoption. (4) (10)

Response: The Department does not intend to provide an additional comment period on the final-form rulemaking. During the drafting process of the

proposed rulemaking, the Department solicited comments during a number of stakeholder meetings, and the proposed rulemaking is based on *Nutrient and Sediment Reduction Credit Trading - Final Policy and Guidelines*, which involved extensive stakeholder input and two comment periods.

Subsection(a) – Definitions

- 20. Comment:** One commentator recommended that the definition for aggregator be changed to read as, “A person that arranges for the sale of credits generated by another person or persons, and/or arranges for the credits to be certified, verified and registered.” (1)
Response: This revision has not been made to the final-form rulemaking. The final-form rulemaking follows the Legislative Reference Bureau’s protocol for regulatory drafting. The regulatory language has the same meaning as that which appears to be suggested by the comment.
- 21. Comment:** One comment was submitted that in part (i) of the baseline definition the term “offset” should be removed. (3)(4)(5)(10)
Response: The term has been removed.
- 22. Comment:** Several comments were submitted related to part (ii) of the baseline definition. In particular, a few stated that this line prevents point sources and others from generating Bay related credits if their local TMDL limits result in greater reductions than those needed to comply with Bay annual cap loads and that the restriction should be removed. Several commentators stated that more guidance is needed on how a TMDL may affect baseline. Some of these commentators stated that it was not clear if a participant needed to meet the TMDL requirements before they could be considered in baseline, or if they only needed to meet their state regulatory requirements for baseline before they start trading. (2)(3)(4)(5)(6)(7)(9)(10)
Response: “Baseline” is defined as, “The compliance activities and performance standards that must be implemented to meet current environmental laws and regulations related to the pollutant for which credits or offsets are generated.” If a source finds it is located in an area with more than one TMDL for the pollutant(s) of concern, baseline is the most stringent set of compliance activities and standards. This baseline must be met before credits can be generated. Generally, that equates to the lowest effluent loading. No changes were made to the final-form rulemaking. In the 2003 “Water Quality Trading Policy Statement”, EPA outlined that baselines for generating credits should be derived from and be consistent with water quality standards. The policy states that where a TMDL has been approved or established by EPA the applicable point source waste load allocation or nonpoint source load allocation would establish the baseline for generating credits. The final-form regulation is consistent with this EPA Guidance and provides consistency across sectors.

- 23. Comment:** Commentators expressed concerns with the baseline definition. There appears to be confusion as to how the TMDL will impact a "baseline." In addition, it is unclear what is included in the term "similar allocation" which is used in Paragraph (ii) of this definition and in Subsection (d)(2)(ii). We recommend that DEP work with stakeholders to address these concerns. The Board should utilize greater detail in setting forth its intent in the final-form regulation. (11)
- Response:** Please see the response to comment number 22. In addition, the term "similar allocation" is necessarily broad as water quality-related load allocations in the Chesapeake Bay Watershed are dynamic. An example of a "similar allocation" is an effluent limitation imposed to meet the downstream water quality standards which is not yet an allocation for a TMDL.
- 24. Comment:** Two commentators suggested that (iii) of the "BMP- Best Management Practice" definition needs to be changed to read, "The term also includes riparian buffers, soil and slope stabilization measures, control of fertilization practices, and other actions and measures designed to reduce erosion, stormwater runoff, and runoff of pollutants from the land surface during precipitation events; or to reduce the contamination of groundwater with pollutants that may affect surface waters." This change is requested because it is redundant to list reduction of soil runoff and reduction of sedimentation as benefits of soil erosion reduction and that sediments should be removed, since they are included in the definition of pollutants, and pollutants are included in this definition. It was also suggested that stormwater management, as a BMP, should be included. (7)(9)
- Response:** This suggested revision has not been made in the final-form rulemaking; however, subparagraph (iii) has been added to the definition of "BMP- Best Management Practice" to include the activities related to stormwater. This added definition mirrors the BMP definition included in the concurrent Chapter 102 final-form rulemaking.
- 25. Comment:** One commentator suggested that the language "and to provide liquidity in the market" should be deleted from the regulation and the definition of "credit reserve". The commentator stated that it is unclear what this means and that credits should not arbitrarily be reduced because of some undefined concern regarding the "liquidity of the market." The commentator stated that if the Department has something in mind, then it should propose such approach or delete the language from the regulation. (4)
- Response:** The Department has removed the words "liquidity in the market" from the final-form rulemaking.
- 26. Comment:** The need for the phrase "and to provide liquidity in the market" in the "credit reserve" definition is unclear. Why would the Commonwealth want to manage "liquidity" in a market and how has DEP determined that the credit reserve will be properly sized to achieve that liquidity? The Board

needs to provide an explanation or delete it from the final-form regulation. (11)

Response: This phrase has been removed from the definition.

27. **Comment:** One commentator stated that the definition of a “credit” should reflect how delivery ratios, when applied to point source cap loads, determine how many credits are needed.(1)
Response: The authorizing language in NPDES permits will contain the conditions by which credits may be applied toward compliance with point source cap loads; therefore, no change has been made to the definition to address this comment.
28. **Comment:** Several comments were submitted seeking clarification on the meaning of the term “defined compliance point” as it is unclear in the definition of “delivery ratio”. One commentator suggested that the term be defined as it appears to be critical to the determination of the ratio. (1)(3)(4)(5)(6)(10)
Response: The Department does not see a need to change this terminology. Typically, a compliance point is defined in a TMDL.
29. **Comment:** The definition of *delivery ratio* contains the phrase "defined compliance point." However, it is not clear what this is referring to. For clarity, this phrase should be defined in the final-form regulation. (11)
Response: Please see the response to comment number 28.
30. **Comment:** Related to the definition of “DMR - Discharge monitoring report” according to existing definitions in Section 92.1, a DMR is the same as an NPDES reporting form. Why are two different terms used for the same form? (11)
Response: Clarification has been added by adopting the definition of the term as it is stated in the concurrent rulemaking replacing Chapter 92 with Chapter 92a.
31. **Comment:** A few comments were submitted related to the edge of segment ratio. In particular, the comments stated that it is unclear how the edge of segment ratio reflects pollutant contributions associated with groundwater flows and asked if the ratio really reflects pollutant contributions associated with groundwater flows. The comments suggest that clarification is needed to address the comparison between the relatively short amount of time it takes for surface runoff of pollutants into streams; it should take considerably longer for groundwater contributions to occur in those same streams. (1)(3)(5)(6)
Response: For each Chesapeake Bay model run, there are four possible sources of nutrient inputs applied to each land use. These are manure, chemical fertilizer, air deposition, and mineralization. Whenever a watershed model run is completed, the results include a summary of nutrient and sediment loads that are projected to be run-off or moving through

groundwater to surface water and exiting the model segment at the farthest point downstream. The loads from each segment are known as the edge of segment loads (EOS). The EOS ratios were developed by dividing the amount of nutrients coming from the model segment (the EOS loads) by the total amount of nutrients applied to the land within the segment (the input loads). The total nitrogen inputs are first adjusted to subtract out the amount of nitrogen that would be removed by crop uptake.

- 32. Comment:** Commentators questioned the use of the term "groundwater" in the *Edge of segment ratio* definition. It is unclear whether this ratio could provide accurate information about a pollutant moving through both surface runoff and groundwater flows. The Board should provide an explanation or improve the definition in the final form regulation. (11)

Response: Please see the response to comment number 31.

- 33. Comment:** The definition for "*Tradable load*" ends with the phrase "a level of reduction activities identified by the Department as reasonably attainable." What criteria and process will be used by DEP in determining what is "reasonably attainable"?(11)

Response: During program development, Pennsylvania recognized that the Chesapeake Bay Watershed model estimates were based on the assumption that everyone who can reduce nutrients and sediment will do so to the maximum extent. This is commonly referred to as the "everything, everywhere, by everybody" (E3) scenario. The E3 scenario likely overestimated the maximum feasible nutrient and sediment load reductions, so Pennsylvania made adjustments to the estimates to better represent a feasible effort. Pennsylvania reduced nonpoint source reductions in E3 by 10% and estimated the reductions for those BMPs in the Tributary Strategy that were not included in the E3 scenario. After adjusting the E3 scenario estimates, Pennsylvania estimated the maximum allowable credits as the difference between the load estimates from the revised E3 scenario and the Tributary Strategy loadings goal. The scenario values and the tradable load values will change as new BMPs are developed or the efficiencies of existing BMPs are revised. The Department notes that the modifier "reasonable" is found in other environmental regulations, as well, where the exercise of judgment and flexibility are similarly appropriate.

- 34. Comment:** Two comments suggested that "offsets" should not be mentioned in the definition of "threshold" and that the definition of "tradable load" should somehow incorporate the term "threshold". It was also stated that the statement "reasonably attainable" in the definition of the "tradable load" is ambiguous and open-ended. (3)(4)(5)(10)

Response: The term "offset" has been removed from the definition of threshold. Additionally, when the tradable load was developed it did not include reductions associated with threshold so it would be inappropriate to add "threshold" to the definition. Information on how the tradable load was

developed can be found on the Department's Nutrient Trading website. No changes have been made regarding the term "reasonably attainable." The Department will need flexibility regarding the information generated by TMDL models and water quality standards, and it is not possible to have a more accurate terminology. Please also see the response to comment number 33.

- 35. Comment:** Several comments were submitted related to "trading ratios" in that the term "offsets" should be removed because offsets are not subject to any of these trading ratios. (3)(4)(5)(10)

Response: The word "offsets" has been removed.

- 36. Comment:** One commentator suggested that it is unclear what is meant by "water quality" or what would be included in "other considerations" as set forth in the definition of "trading ratios" and that these open-ended concepts are inappropriate and should not be used as a basis to reduce the credits traded. The commentator stated that if the Department intends to impose any sort of trading ratio, reserve, or other reduction on the sale of credits from a point source seller to a point source buyer, then the regulations should set forth the specific amounts and that it should not be a moving target and subject to the whim of the decision maker. (4)

Response: Much of the definition of "trading ratio" is taken from EPA's 2003 "Water Quality Trading Policy Statement". The phrases "water quality" and "other considerations" are used in the definition of "trading ratios" because when calculating the reductions, trading ratios need to be considered and used as appropriate to help ensure the trade provides the desired level of nutrient reductions and water quality benefits. Point source credits are calculated based on reductions to the Chesapeake Bay and will include the application of the delivery ratio and reserve ratio. This information on the applicable trading ratios for calculating credits is readily available on the Department's Nutrient Trading website. The authorizing language in NPDES permits will contain the conditions by which credits may be applied toward compliance and will address what ratios may be used by a permittee when credits are applied toward permit compliance.

Subsection (b) Chesapeake Bay water quality.

- 37. Comment:** A comment was submitted related to the inclusion of the term "offset" in paragraphs (1) through (6) of subsection (b). In particular, related to paragraphs (1) and (2) the commentators stated that offsets are not certified, verified and registered. (3)(4)(5)(10)

Response: The term "offset" remains in all except for subsection (b)(2). "Offset" was removed from subsection (b)(2) because the offsets will be approved and this subsection refers to the three-step process for credit certification, verification and registration.

Subsection (c) Methodology.

- 38. Comment:** A comment was submitted that the term "offset" should not be used in this subsection (c). (3)(4)(5)(10)
Response: The term has been removed from this subsection except for the clarification that was added to paragraph (5) regarding offset information in the DMR.
- 39. Comment:** A comment was submitted cautioning the Department in making the references in subsection (c)(2) to a specific version of the Bay model and in subsection (c)(3) to a lengthy list of other models and technical references. According to the commentators, almost all of these references are already out of date and irrelevant. One commentator questioned why the Chesapeake Bay Watershed Model Version 4.3 or any subsequent version is referenced in subsection (c)(2) when Version 5.3 of the referenced Model is or will be available. The commentator stated that the proposal seems to indicate that only the latest version of the model should be used and requested to know at what point Version 5.3 will be available to calculate and/or allocate nutrient loading reductions to the respective basins in the Watershed and, therefore, also be available for calculations. (3)(4)(5)(6)(10)
Response: The Department removed the reference to version 4.3 of the model and restated the obligation; the Department has not removed the references to the sources listed in subsection (c)(2) through (4) as these references serve as background material to the Chesapeake Bay program and watershed model.
- 40. Comment:** One commentator questioned whether the language in subsection (c)(3) that states the Department "may rely on results ... to approve other pollutant removal efficiencies for BMPs" and in subsection (c)(5) "the Department may rely on the information supplied by permittees in the DMR when calculating and certifying credits and offsets," means that only the Department can calculate offsets under the proposed regulation or that a permittee, itself, may calculate offsets subject to Department review and approval. The commentator noted that in subsection (c)(5) it would seem that a permittee, itself, could submit the calculations. The commentator also questioned what the Department's expected timeline is for calculation of credits/offsets or approval of a submitted calculation. (6)
Response: A change has been made to paragraphs (1), (5) and (6) of subsection (c) to clarify that the Department will use the information when certifying a pollutant reduction activity. Please see the response to comment number 8 related to the expected timeline.
- 41. Comment:** One commentator suggested that the methodology section of the final regulation (or section addressing eligibility requirements for the Chesapeake Bay) should specifically encourage and provide a mechanism for NPDES permittees to evaluate and implement a broad range of BMPs, as well

as other applicable actions, such as non-stream discharge alternatives, as a means of facilitating and achieving nutrient loading reductions. (6)

Response: The final-form rulemaking does not include this level of specificity but the Department will work with NPDES permittees that seek to evaluate and implement a broad range of BMPs and other actions. Subsection (c)(6) provides the ability to use a number of sources of peer reviewed and published studies to quantify reductions from a pollutant reduction activity.

42. **Comment:** Several comments were submitted regarding the use of the edge of segment factor. In particular, they stated the EOS factor is a good tool on a watershed basis and can be defended but its use on a specific field (farm) can not be defended, since the EOS was not developed for site specifics, but rather larger watershed segments. One of the comments suggested that while the EOS factor maybe a valid tool in the watershed model where it has been calibrated to integrate the landscape features, land use, and management, etc. within the entire stream segment watershed, the only legitimate use of this factor on a specific farm field would be if that field happened to exactly represent the integration of all of the landscape, land use, and management factors that went into calibrating the EOS factor for that segment. (2) (9)

Response: The Department recognizes the concerns expressed in the comment; however, the EOS factor is the best science that is currently available to make this correlation. As the science and values evolve, the Department will make additions to the quantification and application of the ratio.

43. **Comment:** A commentator suggested that §96.8(c)(4) should be clarified because as drafted it indicates that the Department may rely on the methods, data, sources and conclusions in the listed EPA documents, but it does not identify what decisions those documents would potentially be used for. The regulation should reflect whether the documents would be used to calculate removal efficiencies, calculate credits, for certifying credits, and/or for some other specified purpose. (4)

Response: A change has been made to subsection (c)(1) to clarify that the Department will use the outlined information when certifying pollutant reductions activities for credit generation.

44. **Comment:** Subsection (c)(6) includes the sentence, "The Department may also rely on other published or peer-reviewed scientific sources." How will the regulated community know what these sources are? Will DEP publish a list in the *Pennsylvania Bulletin*?(11)

Response: The Department will not publish a list of all published and peer reviewed scientific sources that may be available. Subsection (c)(6) provides flexibility to the regulated community in what methodology they propose to use for calculating reductions but the important component to the methodology is that it must fall within the outlined criteria.

45. **Comment:** One commentator stated that explicit language should be included in the regulation to prohibit changes in the credit calculation methods for multiple compliance year credit proposals that have been certified by the Department. This commentator states this is needed because § 96.8(c) allows for the re-adjustment of BMP reduction efficiencies, delivery ratios, and edge-of-segment ratios as the Bay model is continually refined; subsection (g)(3) states that credits must be certified for each year they are used to achieve compliance; subsection (e)(5)(iii) states that the Department may certify credit proposals for multiple years, but verification and registration must be done for each compliance year; however, subsection (f)(2)(iii)(C) states that DEP may conduct other verification activities to ensure that pollutant reduction obligations are being met. It is through this latter section that the commentator states that DEP could alter the multiple year certified credits because EPA lowered the BMP reduction efficiency, and a reduced efficiency would mean that the expected pollutant reduction would no longer be met. The commentator stated that there needs to be certainty and predictability for both the sellers who are making investments in BMPs and buyers who are relying on those credits being available. Similarly, this commentator stated that subsection (e)(5)(ii) and (iii) creates a timeline bottleneck in which credits must be certified in the fall and early winter, so that the entity implementing the BMP(s) can have an idea how many credits will be available for sale if the entity goes through the expense of implementing the BMP(s) in the spring. The other issue relative to § 96.8(e)(5)(iii) was that explicit language should be included in the rulemaking to prohibit changes in the credit calculation methods for multiple compliance period credit proposals once those credit proposals are approved. (1)

Response: The Department has added subsection (e)(8) to address these concerns. By the addition of subsection (e)(8) the Department does not feel a bottleneck will occur as the commentator expressed. Subsection (e)(8) outlines the duration of certification. Specifically, the term of a certification will generally be for five years, during which time the Department would not anticipate changing the terms of the certification. If, at the end of the 5-year period the holder of the certification wishes to renew it, the certification can be renewed following the provisions outlined in subsection (e)(9).

Subsection (d) Eligibility requirements for the Chesapeake Bay.
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46. **Comment:** Several comments were submitted that the term "offset" should not be used in subsection (d) for reasons mentioned in other comments. (3)(4)(5)(10)

Response: Based on the revision to the definition and the intended use of an offset, the Department has left the term in some provisions of subsection (d) but clarified the use of the term. The term has been removed from subsection (d)(3).

- 47. Comment:** In order to generate credits and offsets, Subsection (d)(1) requires that generators "demonstrate a reduction in pollutant loads beyond...any threshold established by the Department." How will the generators know what this threshold is? This threshold should be set forth in the final-form regulation. (11)
Response: The Department has removed "by the Department" from subsection (d)(1), as applicable threshold requirements are set forth in the final-form rulemaking, itself, in subsection (d)(3).
- 48. Comment:** One commentator stated that the baseline requirements in subsection (d)(2)(i), while logical, could result in unintended consequences due to the details of compliance with current regulations. For example, in Chapter 83 (relating to State Conservation Commission) there is a wide range in management that can be used to meet the requirements of this chapter. A plan for a farm could be written with all surface application of manure or with all manure being injected and the commentator questioned which manure management activity would meet baseline compliance and stated that the answer has major implications for calculating credits. If the plan for surface application is the baseline and is modified to all manure being injected then the management change could be used to generate credits but if the plan already calls for the injection of the manure this could not be used to generate credits. It was suggested by this comment and several others that in addition to simply requiring compliance with current regulations, additional criteria may be required such as using the existing compliance management on a certain date as the baseline. These commentators stated that by setting a specific date in the regulation the Department would ensure that operations do not go backwards in management just to generate nutrient credits. (2)(7)(9)
Response: The Department has revised the final-form rulemaking to include January 1, 2005 as the date for baseline, unless a revision to baseline has been made since that date, in which case the revised requirements must be met. For example, if the final-form revisions to Chapter 102 are finalized then an agricultural operation may need to meet those requirements for baseline.
- 49. Comment:** Two commentators suggested that a reference should be added to section 96.8(d)(2)(i) that an operation must also meet Chapter 92.5a (CAFO's), if applicable to their operation. (7)(9)
Response: This reference has been added to the final-form rulemaking.
- 50. Comment:** Several commentators suggested that the language of subsection(d)(2)(ii) will keep point sources and others from generating Bay-related credits if their local TMDL limits result in greater reductions than needed to comply with their Bay annual cap loads and that this restriction should be removed. The commentators suggested that for point sources, the baseline should simply be the annual cap load required for the Bay. Any reductions beyond that should be eligible for credit generation, while still meeting local TMDL reduction needs. (3)(4)(5)(10)

Response: Please see the response to comment number 22.

51. **Comment:** In its comments, PMAA contends that the language in Subsection (d)(2)(ii), together with the definition of "baseline," will unnecessarily limit the ability of point sources to generate credits while still meeting local TMDL reduction requirements. The Board should provide an explanation, or if necessary, modify this provision to promote additional pollution reduction. (11)

Response: Please see the response to comment number 22.

52. **Comment:** One commentator suggested that the regulations should clarify that the threshold requirements set forth in proposed §96.8(d)(3) apply only to nonpoint sources. This subsection provides that the Department may establish other threshold requirements necessary to ensure the effectiveness of the use of credits and offsets to meet legal requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay. Such criteria should not apply to point sources. If the Department were to intend for it to apply to point sources, then the Department should provide examples of situations where it might be appropriate. (4)

Response: No changes were made to the final-form rulemaking. Subsection (d)(3)(i) states, "In order to generate credits, an agricultural operation must meet one of the following ...", so it is clear that the items outlined in subparagraph (i) are for an agricultural operation. No changes were made to subparagraph (ii) because, as stated in other responses, flexibility in this final-form rulemaking is needed to ensure the actions undertaken within the program reflect the water quality standards downstream and reflect changes related to the protection and restoration of the Chesapeake Bay. See, for instance, the responses to comment numbers 4 and 54 regarding program flexibility.

53. **Comment:** Two commentators suggested that additional information should be included in subsection (d)(3)(i)(B) so that no applications of mechanically applied manure be allowed in the 35 feet of permanent vegetation between the field and surface water. These commentators recommended the use of language from Chapter 83 (relating to State Conservation Commission), which is: "There is no mechanical application of manure within the buffer area". (7)(9)

Response: This subsection has been revised to include this additional language.

54. **Comment:** Three sets of comments were submitted regarding subsection (d)(3)(ii) and subsection (d)(5) noting that the statement, "The department may establish other threshold requirements necessary to ensure effectiveness of the use of credits and offsets to meet legal requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay" should be deleted from the rulemaking. The purpose of the proposed rulemaking is to set a precedent and standard and the inclusion of this statement allows the

department too much flexibility in changing the standards and requirements of the program. (1)(7)(9)

Response: As stated in other responses, flexibility in this rulemaking is needed to ensure the actions undertaken within the program reflect the water quality standards downstream and reflect changes related to the protection and restoration of the Chesapeake Bay. See, for instance, the responses to comment numbers 4 and 52 regarding program flexibility.

55. **Comment:** Subsection (d)(3)(ii) allows DEP to establish other threshold requirements to protect the Chesapeake Bay. Will these other requirements be promulgated as regulations? If not, how will generators know what these requirements are? We note that requirements that are not contained in law or a promulgated regulation are not enforceable by the Board or DEP. Similar concerns apply to subsections (d)(5) and (e)(3)(v). (11)

Response: Please see the response to comment number 54. The Department understands the enforceability of requirements, and will establish them in the most prudent manner available under the circumstances, taking into account many factors. Notice will be similarly provided. By way of example, if EPA establishes a TMDL that necessitates a quick determination by the Department, then the Department will likely post notice on its Nutrient Trading website and make case-by-case determinations until a regulatory amendment, if necessary, were adopted.

56. **Comment:** Several commentators suggested that section (d)(4) is overbroad and should be eliminated. It was suggested that the statement is contrary to the intent of the proposed regulation, which would allow a permittee to attain compliance with the term of its NPDES permit by the purchase of credits. (See proposed Section 98.6(g)). Several commentators provided an example to point out the issue with this statement. One example related to a single pH violation and if that meant the facility, instead of being able to buy credits as originally planned, would now need to spend millions of dollars in upgrading its facility. Another example was if a wastewater treatment plant is under a consent order to address wet weather issues they would not be able to sell credits to neighboring systems who may need them to meet permit effluent limits. One commentator suggested that this section should not apply to other environmental media and that noncompliance with an order should not preclude participation in the trading program since Department orders may be unilaterally issued. (1)(4)(6)

Response: The Department has narrowed subsection (d)(4) to apply when past or current noncompliance indicates a lack of ability or intention to comply with the stated items. The Department does not intend to let minor infractions exclude a person from engaging in trading.

57. **Comment:** What is the appeals process for someone under Subsection (d)(6)? It should be cross-referenced or set forth in the final-form regulation.(11)

Response: Please see the response to comment number 9.

Subsection (e) Certification requirements for the Chesapeake Bay.
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- 58. Comment:** A comment was submitted that the term "offset" should not be used in this subsection (e). (3)(4)(5)(10)
Response: The term has been removed throughout the subsection, except it remains in paragraph (3)(iv) as it relates to calculating point source reductions.
- 59. Comment:** One commentator noted that the proposed regulation failed to include provisions currently included in the Department's Technical Guidance Document (392-0900-001) that govern the eligibility of projects to generate tradable nutrient credits through conversion of farmland. This provision was also subject to an amendment published in the May 30, 2009 issue of the *Pennsylvania Bulletin* (see 39 Pa.B. 2747). The notice, which pertained to eligibility for generation of tradable credits through the idling of whole farms or substantial portions of farms, was proposing to essentially prohibit tradable nutrient credits from being generated from any project that involves the idling of farmland to facilitate nonfarm development, regardless of whether or not the credits would be applied to the same site as the site whose farmland is being idled. At the time of the notice, the Guidelines authorized credits to be generated from idling of farmland, if the credits would be applied to development of the same idled farmland. This commentator believes that the regulations should address the issue of eligibility for generation of nutrient credits as a result of idling of whole farms or substantial portions of farms and that the regulations should expressly prohibit the ability of nutrient credits to be generated and utilized in a manner that facilitates the idling and nonfarm development of farmland. This commentator also expressed concern with respect to the ability of nutrient credits to be generated through manipulation of federal conservation programs to finance long-term land-banking of farms for future nonfarm development. (7)
Response: The Department has incorporated this provision into subsection (e). The comment relating to "the ability of nutrient credits to be generated through manipulation of federal conservation programs to finance long-term land-banking of farms for future nonfarm development" is similar to comments raised during development of the technical guidance regarding the use of public funds to generate credits. The technical guidance document left, and the regulation leaves, the ownership of credits generated by public funding up to the source providing that funding. The Department chose the stance on the ownership of credits as reasonable middle ground rather than placing restrictions on a person's ability to generate credits from monies from another source or a person's ability to generate credits on land previously enrolled in a federal conservation program.

- 60. Comment:** One commentator expressed concern that subsection (e)(1) excludes DMR-generated credits and suggested that point source to point source trading issues should be addressed here as well. (1)
Response: No changes to this subsection were made to address this comment. This subsection does not exclude DMR-generated credits but clarifies how credits will be certified for use toward permit effluent limits. The methodology of subsection (c) is referenced in subsection (e)(3)(iii), which refers to DMR information being an applicable method and in the definition for “pollutant reduction activity”, which refers to effluent controls as an example that highlights point source generated reductions. In addition, the authorizing language in NPDES permits will contain the conditions by which credits may be applied towards compliance.
- 61. Comment:** One commentator questioned how 45 proposals have been approved because the Department did not have the regulatory list of items that it now proposes in subsection §96.8(e)(2). This commentator suggested that the Department should make it clear that these projects do not need to go back and be recertified under the new standards and that the new regulations should only apply prospectively to new projects. (4)
Response: The Department has added subsection (e)(9)(iv) to address this comment. This new subparagraph makes clear that if a proposal has been certified and the certification does not contain an expiration date the recipient of the certification must submit a request for renewal at least 180 days prior to five years after the effective date of this final-form rulemaking. At that point, the certification, if renewed, will be updated to meet the requirements of section 96.8 and other applicable laws, water quality standards and requirements in effect at that time.
- 62. Comment:** Subsection (e)(2)(i)(D) states the "implementation of the pollutant reduction activity must be verified to the extent acceptable to the Department..." What is "the extent acceptable" to DEP? There is a reference to paragraph (4) and the "verification plan" but it is unclear how the "extent acceptable" is identified. Also, paragraph (2)(i)(D) appears to be unnecessary since verification is covered in paragraph (4). (11)
Response: The statement “to the extent acceptable to the Department” has been removed. Paragraph (2)(i)(D) remains in the final-form rulemaking as a useful reference point.
- 63. Comment:** One commentator suggested that subsection (e)(2)(ii)(E) should specify that only information on any source of “public or governmental” funding should be provided. (1)
Response: This revision has not been made. Information on all sources of funding is useful to help the Department assure the viability of a proposed credit generation activity.

- 64. Comment:** Clarification was sought on the terms “financial guarantee mechanisms,” “contractual arrangements,” and “insurance products” in subsection (e)(2)(ii)(F) since they are undefined. (1)
Response: The terms are used as an example of ways that a person may outline how failure of the pollutant reduction activity will be managed. For example, a person may provide an explanation that they have contracts with multiple farms but only half of those farms are submitted for certification and if needed the remainder could be used to address any nutrient reduction failure. Another example would be an explanation of the performance guarantee that is provided by the product manufacturer. The final-form rulemaking has not been revised.
- 65. Comment:** A comment was submitted that clarification is needed in subsection (e)(2)(ii)(I) related to the term “other participants” since it is not defined and could potentially involve dozens of individuals when dealing with large agricultural operations or wastewater treatment plants that are producing credits. This comment also suggested that this reference be deleted since the person submitting the request is the responsible party. (1)
Response: This section has been revised and rather than “other participants” it now states “the names of the participants”. The Department recognizes that this request may involve a number of participants but the information is needed to ensure that the Department does not certify the same project multiple times. It is a component of program tracking.
- 66. Comment:** Several comments were submitted regarding subsection (e)(3)(vi). In particular, several wondered if it is appropriate or necessary to include actual numbers for the tradable load. One comment suggested that the Department should provide public information on the genesis of these numbers because it is unclear how these numbers were calculated and, as such, limits the ability of the public to understand and comment on such values. One comment stated the section should include the fact that tradable load for the Chesapeake Bay Watershed is for the Pennsylvania portion of the watershed. It was suggested that the numbers be deleted which would allow the Department to periodically re-evaluate tradable load without subsequent regulation changes.(3)(4)(5)(7)(9)(10)
Response: The Department has revised this subsection, which in the final-form rulemaking is subsection (e)(4)(i). The revisions include the removal of the specific tradable load amount, clarification that the tradable load is for the commonwealth’s portion of the Chesapeake Bay Watershed, and assurance that the specific loading can be found on the Department’s Nutrient Trading website.
- 67. Comment:** Subsection (e)(3)(vi) sets forth the level which the sum of all credits may not exceed. It then contains the phrase “...unless otherwise revised by the Department.” Will this be done via regulation? If not, how will

generators know what the new levels are? We note that requirements not contained in law or promulgated regulations cannot be enforced.(11)

Response: The language, "...unless otherwise revised by the Department," has been removed from the final-form rulemaking. Please see the response to comment number 66.

- 68. Comment:** Two commentators suggested that the credit reserve of 10% should be set in the regulation. The purpose of the regulation is to set the "ground rules" and by setting the credit reserve of 10%, the department will be added certainty to the credit reserve portion of the proposed rulemaking.(7)(9)

Response: The Department has made this revision in the definition of "reserve ratio".

- 69. Comment:** One commentator suggested that subsection (c)(e)(3)(v) should have explicit language included that prohibits changes in the credit calculation methods for multiple compliance period credit proposals that have been approved. It is suggested that Department include a time horizon on the credit certification letter and guarantee the "credit yield" for the BMPs will be honored through the end of that time horizon. This revision would allow the Department discretion in the duration of credit yield certainty, while still offering some predictability to the credit generator and purchaser. (1)

Response: The Department has added subsection (e)(8) to the final-form rulemaking to address this comment.

- 70. Comment:** It was suggested that subsection (e)(3)(vii) should add some clarifying statement that the credits may be available "to the applicant" for certification, if the funding source provider allows. Another commentator stated that this section should be struck because DEP should simply be following the rules established by the funding agency, not enforcing additional rules on the funding source. Such latitude on being able to approve or deny credits accrued from a BMP implementation project that was fully or partially subsidized by Federal funds, limits the predictability for credit generation and thereby inhibits initiating nutrient trading activities and projects that would implement BMPs, reduce pollutant loads, and generate nutrient credits through the use of federal or state funds. The commentator is also concerned with how this provision may affect point source to point source trades. (1) (7) (9)

Response: Please see the response to comment number 59. The trading of cost-shared BMPs, where allowed by the grantor, encourages participation in BMP programs and remains constant with the goal of maximizing the rate of BMP implementation. Credits will only be restricted if the funding source restricts the use or ability of that funding to be used to generate marketable credits.

- 71. Comment:** One commentator suggested that subsection (e)(4) is silent on the use of DMRs and that the section should be amended to reflect that for point sources the use of DMRs may be used for verification. (4)

Response: This suggested edit is not needed. This provision, which is paragraph (5) in the final-form rulemaking allows for self-verification, which would be the DMR for a point source.

72. **Comment:** In one set of comments, the commentator raised a question with subsection (e)(5). The commentator suggested that the regulation should include a provision allowing the seller to use the credits in a subsequent water year when the seller has done everything that is required and due to no fault of the seller the Department does not timely act upon the verification and certification. The commentator stated that protections can be built into such approach to assure that it will not result in more deliverable loads to the Chesapeake Bay than is otherwise provided for. (4)

Response: Consistent with past practice and EPA guidance, the final-form rulemaking only allows credits generated by a pollutant reduction activity to be used to meet permit effluent limits for the compliance period for which they are certified, verified and registered. Currently a credit has a shelf life of one year which means it can only be used for that year, though the activity that generated the reduction will be generally certified for 5 years.

Proposed Subsection (f) Registration requirements for the Chesapeake Bay.
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Note: The Department notes that proposed subsection (f) is relabeled as subsection (g) in the final-form rulemaking.

73. **Comment:** A comment was submitted that the term "offset" should not be used in subsection (f). (3)(4)(5)(10)

Response: The term has been removed throughout subsection (g).

74. **Comment:** In subsection (f)(2)(ii), what are "basic contract elements"? This term should be defined. Is there a basic model contract or list of basic contract contents which DEP will be establishing? If so, it should be set forth in the final-form regulation. (11)

Response: The reference to "basic contract elements" has been removed from the final-form rulemaking.

75. **Comment:** Related to subsection (f)(2)(ii), several commentators questioned, based on the definition of "registration", why a contract needs to be in place to buy/sell credits prior to those credits being registered. These commentators questioned whether the requirement creates a real predicament for credit generators who may not yet have a customer but have actually created credits. Similarly, one commentator stated that if "basic contract elements" are to be required, then such elements should be set forth in the regulations. The regulations cannot appropriately provide the Department the right to establish any contract elements, regardless of the reasonableness or appropriateness of such provisions. (3)(4)(5)(6)(10)

Response: The reference to “basic contract elements” has been removed from the final-form rulemaking. The subsection still requires a valid contract that ensures that the requirements of section 96.8 will be met. This requirement will help ensure the integrity of the nutrient trading program. The requirement for a contract is also in the Department’s Nutrient Trading guidance document.

- 76. Comment:** As it relates to subsection (f)(2)(iii)(C), one commentator stated that monitoring activities by DEP should be restricted to inspecting the BMP site to determine if the BMP has been implemented and maintained as approved in the credit proposal. The BMP load reductions utilized in the credit calculation and certification process should not be brought into question by post-water quality monitoring to determine if the assumed BMP load reduction efficiencies are realized. If the actual reductions realized were less than the reductions predicted by the model used to calculate credits, it would be through no fault of the credit generator. Such monitoring could be helpful in revising the model for the future, but should not be used to penalize a credit generator who is acting in good faith with DEP’s rules, regulations and calculations. (1)

Response: This provision has been moved (see new subsection (f)), but not revised. It explains that the Department may do its own spot checks and verification to ensure that pollution reduction activities have indeed been performed.

<p>Proposed Subsection (g) Use of credits and offsets to meet NPDES permit requirements related to the Chesapeake Bay.</p>

Note: The Department notes that proposed subsection (g) is relabeled as subsection (h) in the final-form rulemaking.

- 77. Comment:** Two sets of comments point out that there was a typographical error in the numbering under § 96.8 (g) that has resulted in two number fives (5) instead of a number (6). (1)(4)

Response: The numbering error has been corrected.

- 78. Comment:** A comment was submitted that the term "offset" should not be used in this subsection. (3)(4)(5)(10)

Response: The term remains in this subsection because the subsection pertains to the use of credits and offsets to meet NPDES permit requirements related to the Chesapeake Bay.

- 79. Comment:** Many comments were submitted regarding subsection (g)(5). Many stated that although the Department provides a narrow exception to this strict requirement, any exception needs to be much broader in order for the trading program to be a workable solution. It was suggested that if a permittee has purchased credits through a valid contract, and the credits later become unavailable through no fault of the permittee, then the permittee should not be

penalized under any circumstances and should not risk enforcement action by the Department. A few suggested that the permittees must be “held harmless” from the failure of credit-generating activities to produce the required amount of credits needed. And several stated that if this language is retained in the final regulation, there will be very little interest on the part of permittees to pursue credit trading (buying or selling). (1)(4)(3)(5)(6)(10)

Response: The paragraph is designed to offer protection to a permittee when credits are unavailable through no fault of the permittee. The Department is unable to extend the protection as far as the commentators requested because the permittees are required by law to meet their effluent limits, regardless of the manner in which they have chosen to do so. At the same time, however, the Department has made efforts to provide mechanisms for assistance and to help ensure that failure of credit availability in the market as a whole, during a major storm event, for instance, does not occur. The rulemaking now specifies that the Department will retain a 10% credit reserve, which will be set aside to address pollutant reduction failures and uncertainty. In addition, credit purchases through private aggregators or PENNVEST may help minimize risk. The Department’s approach is consistent with EPA’s “Water Quality Trading Policy,” dated January 13, 2002, which states the following: “In the event of default by another source generating credits, an NPDES permittee using those credits is responsible for complying with the effluent limitations that would apply if the trade had not occurred.”

- 80. Comment:** Paragraph (5) begins with this sentence: "Permittees are responsible for enforcing the terms of their credit and offset contracts, when needed to ensure compliance with their permit." The expectations of this sentence are unclear. What enforcement tools will be available to permittees? In addition, PMAA expressed serious reservations about this paragraph and indicated that it may significantly reduce involvement in the trading program. The Board should explain its intent, and avoid language that will unnecessarily deter entry into the trading market. (11)

Response: A permittee can enforce the terms of its contract in the same manner that it can enforce any other contract. To some extent, this will be dependent upon the contract language. Please also see the response to comment number 79.

- 81. Comment:** As it relates to subsection (g)(5), one commentator questioned if the permittee would still be responsible if PENNVEST becomes the nutrient credit clearinghouse? (1)

Response: Yes. While having PENNVEST as a clearinghouse should reduce the risk of credit unavailability, a permittee would still be responsible if PENNVEST could not provide replacement credits. Please see the responses to comment numbers 79 and 80.

Proposed Subsection (h) Water quality and TMDLs.

Note: The Department notes that proposed subsection (h) is relabeled as subsection (i) in the final-form rulemaking.

82. Comment: A comment was submitted that the term "offset" should not be used in this subsection. (3)(4)(5)(10)

Response: The term remains in this subsection in the final-form rulemaking.

83. Comment: One commentator suggested that subsection (h)(2) is extremely vague and should be eliminated. This commentator stated that is unclear what is meant by the "compliance point" and it is unclear how a net increase will be determined. This commentator also asked if the New York State discharges going through Pennsylvania waterways impact Pennsylvania facilities from the right to trade if New York State is above its cap load. This commentator suggested that if this section means that trading will be based upon the consideration of deliverable loads, then the regulations should reflect how the adjustments will be made. (4)

Response: In the 2003 "Water Quality Trading Policy Statement", EPA outlined that trading may be used to maintain water quality in waters where water quality standards are attained, in ways such as compensating for new or increased discharges of pollutants. Typically, compliance points are outlined in a defined TMDL. New York discharges going through Pennsylvania at this time do not impact Pennsylvania's ability to trade.

84. Comment: Comments were submitted related to how this section relates to the definition of "baseline" and that if local stream TMDLs are developed for total nitrogen or total phosphorus and result in lower publicly operated treatment works (POTW) NPDES permit limits than those required for the Chesapeake Bay cap loads, the POTW should be allowed to trade or sell those excess loading reductions as credits for the purpose of the Bay compliance program. There is also an issue for nonpoint sources if they are on a nutrient or sediment impaired stream. The regulations should not require a farmer in an impaired TMDL-affected watershed to meet higher BMP efficiencies or have higher thresholds than normally set in order to have credits certified for sale. Another commentator stated that subsection(h)(1) creates uncertainty for generating nutrient credits on impaired waters where a TMDL has not as yet been approved and as if non-point BMPs are required to meet the TMDL for an impaired stream, are those BMPs ineligible for nutrient credits? There is further uncertainty for impaired streams that don't yet have a TMDL. And the commentator stated that this concern is similar to the concerns mentioned with respect to § 96.8(d)(3) and (4) on compliance and that point source to point source trading needs to be specifically addressed or clarified with respect to § 96.8(h)(1) and (2). One of the commentators suggested that there needs to be additional clarification in the rule for the identified situations. (1)(10)

Response: Please see the response to comment number 22.

Proposed Subsection (i) Public participation.
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Note: The Department notes that proposed subsection (i) is relabeled as subsection (j) in the final-form rulemaking.

85. Comment: A comment was submitted that the term "offset" should not be used in subsection (i). (3)(4)(5)(10)

Response: The term has been removed from this subsection.

86. Comment: A comment was submitted that aside from the fact that section 92.61 (relating to public notice of permit application and public hearing) will become 92a.83, the public notices called for under section 92.61 are significantly different than what the Department has been using for credit generating proposals and are not appropriate for this purpose. This commentator suggested that the last sentence should be deleted.(3)(5)

Response: The Department did not delete this sentence in the final-form rulemaking. This sentence makes clear that the public participation requirements for the Nutrient Trading Program are different from what is required for permit applications.